side, and thins off as we recede from it, and in the bottom of the bay and in the river's bed it is of great depth. The open space between the high banks of the bay and river must then have been occupied by the Till. The centre of the valley has been washed away by the sea and river, and in the boulders, forming the "North and South Odd," we have the coarser portions of the Till; the riddlings of the vast excavation. That this is the correct view will appear now clear, when I tell you that from the bridge of Wick to the Loch of Wattin there is not in our river's bed a boulder worth speaking of, while in the "Burn of Haster," which has made deep cuttings in the Till, and is a mere tributary to our river, its channel is strewed with boulders. This shows that while the large volume of our river has been strong enough to remove the clay and boulders, the burn has had force to remove the CLAY ONLY.

From the phenomena our bay presents, I think it must be inferred that Pulteneytown Harbour is in the very worst position, and that any extension of the harbour on the south side of the bay

must end in disappointment to all concerned.

XIII.—Proceedings of the Expedition for the Exploration of the Rewa River and its Tributaries, in Na Viti Levu, Fiji Islands. By John Denis Macdonald, Esq., Assistant-Surgeon, of H. M. S. "Herald," Captain N. M. Denham."

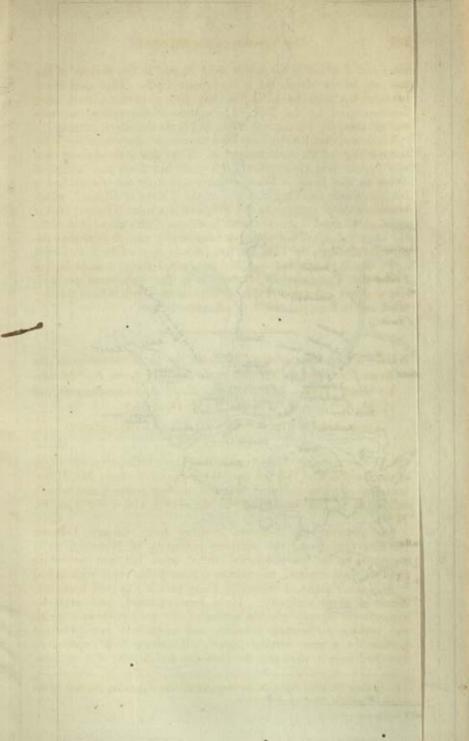
Communicated by Capt. Washington, R.N., F.R.G.S. (Hydrographer).

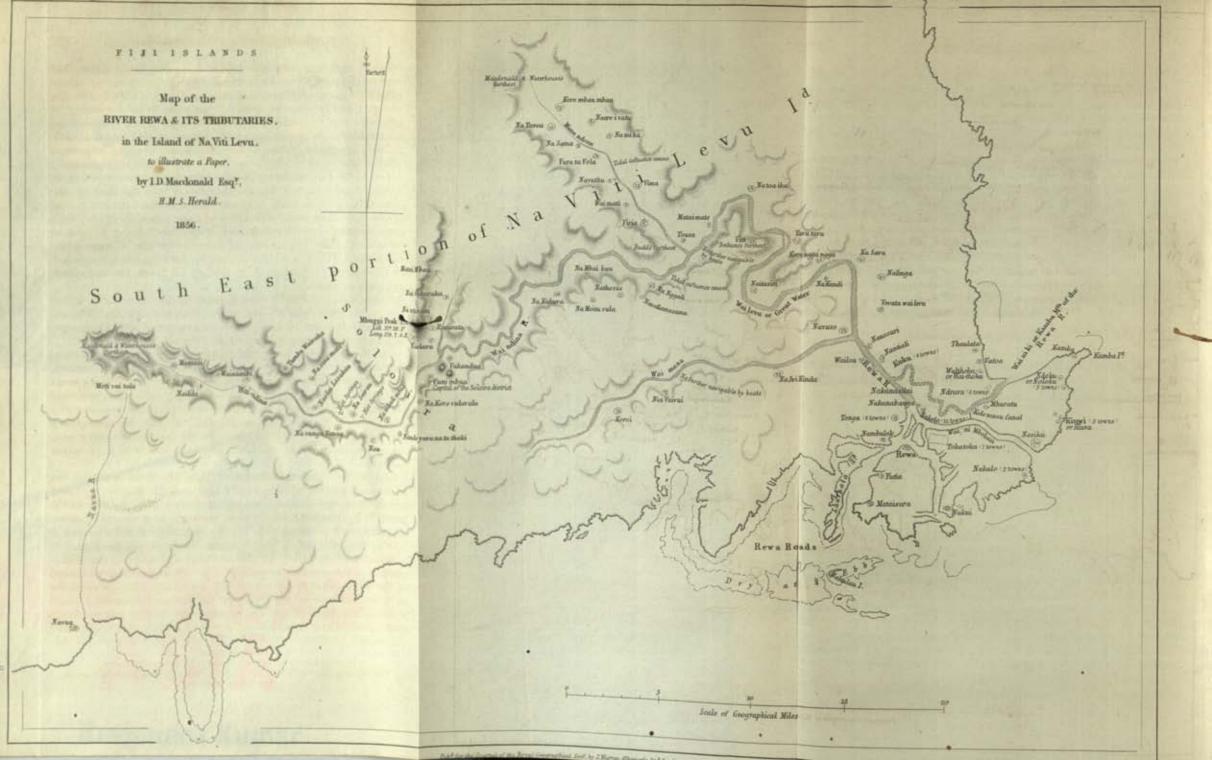
Read, June 22, 1857.

On Friday morning, 15th August, 1856, our little party, consisting of the Rev. Samuel Waterhouse, Wesleyan missionary; Mr. Milne, botanical collector; Joseph Dagwell, leading seaman, and myself, sailed out of Levuka harbour in the cutter, with a fair wind for Mbau.

On entering the Ndaveta levu, or large passage between Na Eau-zambu and the southern extremity of Moturiki, as it happened to be low water, we landed upon the reef projecting from the latter island, to examine a remarkable coral rock called "Ai Vaka Tangka ni Sai-sai." Every part of this rock bears evidence of great antiquity. It is honey-combed, and worn by atmospheric agency and the action of the sea; burrowed by all the various perforating animals, and riven into two principal portions by a wide vertical fissure. Reference to the specimens detached from it, show that the closeness and density of its texture,

<sup>\*</sup> See Capt. Worth's Paper, Nant. Mag., 1852; also Appendix, Journal of the Royal Geograph. Soc., vol. xxi.—Ep.





imparting to it a metallic resonance, is due to the solution and recrystallization of the same materials filling up the minute interstices of the coral structure, and discoloured in some parts by the admixture of the oxide of iron. It appears to be a remnant of an ancient reef, elevated above the sea level, and become the theatre of a slender vegetation, in which two stunted cocoa-nuts play the most prominent parts. There are many legends connected with this spot, some of which may be worthy of notice in passing.

The supreme Fijian deity, Ndengei, is said to have sent Lando Alewa, a goddess, and Lando-tangane, a god, to seal up the Ndaveta levu; and that, in consequence of the morning having dawned upon them in the execution of their commission, they were metamorphosed into the rock now known as "Vaka Tangka ni Sai-sai;" literally, the place of deposit for the fishing-spear. Rambeuli, a Fijian god, is supposed to have placed his sai-sai on this spot on returning from fishing, his favourite occupation, and hence its name.

"Rambeuli" (literally the breaker of the steer-oar) is the greatest or first-born of all the gods connected with the Ndaveta levu; and when any accident happens to a canoe in this passage, he is said, figuratively, to have broken the uli or steer-oar.

The Ndaveta levu, being the entrance into the Mbau waters, was in former times held in sacred veneration by the natives, who, in passing through it, were accustomed to divest themselves of the sala, or head-dress, and seru, or comb; uttering the same shout of respect as used in coming into the presence of a chief. Offerings, usually consisting of the root of yang-gona, twere also presented, with prayers, to the presiding deity; and, having passed the Ndaveta levu, the sala and seru were again assumed.

The comb is generally removed from the head when in the presence of a chief of high rank; and even the more enlightened natives never presume to engage in prayer with the seru in the hair. It is, therefore, simply to be regarded as a national custom.

Another act of veneration is the observance of strict silence in hoisting the latha, or sail of the canoe, in the sacred passage.

We arrived at Mbau in the evening, and took up our nightquarters in the great metropolis of Fiji. Next morning we waited on the Vu-ni-Valu, † by whom all necessary arrangements for an early start were effected. Some of the most influential chiefs of Mbau attached themselves to our party, so that our reinforcement from Mbau consisted of Koroi Ravulo, § Ratu Tholata, |

<sup>\*</sup> Fishing spear.

† More generally known as kava-root (Piper-methysticum).

† The reigning chief of Mbau.

§ An honorary title given to warriors.

¶ A title of rank.

Ratu Yako, Ratu Seru, Ratu Vea, Saudria, a man of Soso, and

Jobi, a very intelligent native of Tonga.

A moderately large double canoe, and a convenient single one, with working crews, were placed at our disposal; and the Rev. Joseph Waterhouse very kindly supplied us with a small boat of light draught, with mast and sail, paddles, and poles, besides many useful things which suggested themselves to our minds after we had left the ship.

Thus provided, we started from Mbau early on the I6th, and soon entered the Wai ni Ki or Kamba mouth of the Rewa river, or Wai levu.\* On passing Kamba in our canoe, Koroi Ravula, a Mbau chief of high rank, seeing his land lying idle whilst yams were being planted in other places, made the good-natured observation, that if our object were accomplished soon enough, he would engage in cultivation; but, if not, that he would not forsake us on that account.

Stretching from Koroi Ravulo's ground at Kamba, for some distance into the mouth of the river, a strip of land, with its Vesi trees and other rich foilage, is held sacred by the natives. No trees are allowed to be cut down, lest the anger of the gods should be involved. Just above this sacred region a large number of canoes were drawn up on a sloping beach, amongst the mangrove trees, having brought down husbandmen from "Mhuretu," situated farther up the river, to plant yams for their neighbours according to Fijian custom.

On the left hand side of the river, the natives pointed out to us a small canal, leading through the mangrove bushes, which is held so sacred that every one passes through it in silence, it being tambu even to touch the overhanging boughs of the trees. The presiding deity of this canal is reputed to possess a lali (drum) so large as to require eight persons to beat it. He is known by the name of Mburerua, and when his lali is heard, it is considered as an indication from heaven that all the neighbouring tribes will be involved in war. The present Mbau chief is known to have propitiated this deity with turtle and large pigs, &c., in troublous times.

A small portion of the mangrove-beach on the right-hand bank, bounded by two small creeks, and pointed out to us as the residence of a foolish god, who once ordered the Mbau canoes to bring him food on one side of the river, and those of Rewa on the other. But this order was repelled, although both parties entertained a certain amount of respect for him. Another god, on the opposite side of the river, usually amused himself by making sarcastic comments on the people passing by in their canoes.

<sup>\*</sup> Wai, water ; levu, great.

Koroi Ravulo lately cut down a large vesi-tree at Mhuretu, to make an upright, or post, for a new chapel. It was formerly held so sacred, that when a native came near it he always made a circuit round it to continue his course; the tree was held sacred to Mburerua. All the gods, from Mhuretu to Kamba, were very

greatly feared by the natives.

We visited a very handsome and commodious Mbure,\* 45 feet high, 30 feet long, and 20 feet wide. The uprights consisted of trunks of trees from 4 to 6 feet in circumference. The walls were made of reeds, tastefully sewn together with fine sinnet.† The horizontal rafters were covered with reeds nicely wrapped round with sinnet, and alternately weaved over with black and white sinnet in most graceful and varied patterns.

We next passed the Kele Musu, or canal, cut by the natives to join the Wai ni Mbokasi, and avoid the inland circuitous course of the Wai ni Ri, so as to save distance in opening into the Wai levu, or main trunk of the Rewa River. We entered the latter then by the Wai ni Mbokasi, and reached Navuso at the close of a hard day's toil, poling and skulling as the depth of

water varied.

This town is situated just within the mouth of Wai Manu, and at a distance of about 12 miles from Mataisuva. It is the present residence of the chief of the Naitasiri district, who received us most warmly, and promised to afford us all the assistance in his power in the prosecution of our journey. The Vu-ni-Valu's message was communicated to him by Koroi Ravulo, chiefly to the effect, that trustworthy persons should be appointed by him to accompany us, and secure the friendly co-operation of the inland chiefs under his authority.

Koroi Ravulo's prologue was delivered in a very eloquent manner, and, towards its conclusion, two large whales' teeth were laid before the chief, with other presents which we selected for him. Thanks were returned by the chief, "Ko mai Naitasiri" himself, in Fijian style, with a storm of acclamation and clapping of hands on the part of a large assembly of courtiers and friends.

We ascertained that a small canoe had arrived before us, and had given notice of our coming, so that a pig was killed for all hands, and hot yams and taro, with vakalolo ‡ and other Fijian food, were now brought on in native trays by female attendants, uttering the "tama," or shout of respect, in a crouched attitude. A large fresh-water bivalve, a species of Cyrena, was served up in earthen bowls. The soup made from them is very savoury, but the fleshy part of the foot is rather tough. A small modiola,

<sup>\*</sup> Sacred temple. † Cordage made from the cocoa-nut husk.

† Vakalolo, native pudding.

occurring in the salt and brackish water, was also cooked in large quantities. The latter is said to have been formerly in more general use as food than the cyrenæ.

We took a note of the chief's report of the existence of thermal springs in the neighbourhood of Soloira, and obtained many other

useful scraps of information to guide our researches.

Monday, 17th .- We set out from Navuso with the chief, Ko mai Naitasiri, who, in the handsomest manner, volunteered to escort us. He had previously arranged to attend a "Solevu" (Fijian assembly), but very kindly said that he would forego a more important matter to accompany us, and give us the advantage of his influence. As we proceeded, wild ducks were to be seen in flocks on every low part of land or sand-bank. The natives distinguish two kinds, viz. Nga ndamu (red), and Nga loa (black). The former is a wilder species than the latter, and not so frequently met with. It stands up, with its head erect, and utters a peculiar sharp cry in flight. Dagwell knocked down six of the Nga loa in two shots; but the others were too shy, and took wing before the necessary approach could be made.

Another accession was made to our party in the person of Ratu Vakaruru (the nephew of our old chief, Ko mai Naitasiri), whom we met on our way, lying down like a gentleman in a small canoe, poled along by two men. He wore a large boar's tooth suspended round his neck by a broad necklace of white beads, and a piece of blue figured sulu round his loins. Ratu Vakaruru struck me as one of the finest Fijians I had ever seen; and I am satisfied that if his likeness could be accurately taken, it would form quite a con-

trast to the ill representations of those islanders extant.

The banks of the river here exhibit a richly ferruginous sandy basis, with a fine alluvial surface 4 to 5 feet in depth. The river runs at first nearly due north from Navuso to Ka Savu, a distance of about 3 m., and then winds suddenly to the westward, Mbau lying to the N.E. The banks on the right hand then passed rather abruptly into rude hilly country. Continuing our course, from Navuso we noticed a few beautiful Nin sawa trees (a species of areca), growing on the point opposite. Nakandi, and every reach onward from this, exhibited more leveliness and picturesque effect. The fresh water is said to be infested with sharks similar to those occurring at Rewa, and consequently in the brackish or salt water. These so-called sharks-from the examination of some heads very nicely prepared by the natives, and the description of these animals given by them-I am inclined to think belong to the skates and rays; and there is every reason to believe that they are peculiar to the fresh water. The natives affirm this; but it will be necessary to procure some specimens before this question can be set at rest. Ko mai Naitasiri told us the case of some men who went up

the river a considerable distance to cut some spars for a heathen temple. On the way back one of them jumped overboard, and instantly a shark snapped off the greater part of one of his feet. Another man sprang to the rescue of his friend, but almost immediately one of his hands was bitten off; and three more persons were bitten, one after another, in the struggle. The man who lost his hand is said to have died soon after from loss of blood, but all the others ultimately recovered.

The sharks are said never to attack the Mbau people when they enter the river; so that it was not unusual in former times to hear those favoured individuals exclaim, Mai Kumbuna, "I am from

Kumbuna," one of the names of Mbau.

Naitasiri opened when we rounded a richly-wooded point of the river, called Wai ni Kumi—literally, "Water of the beard." A superstition, connected with it, exists amongst the people, that beardless boys may expedite the growth of their beard by bathing the chin in the water dripping from the rocks. The latter were of a sedimentary formation, presenting a nearly vertical face, over which a small stream of water was rushing down. This stream might possibly be much augmented after heavy rains, but it is the only approach to a waterfall occurring in the district.

As an instance of the great number of Cyrenæ in the river, I may mention, that Ratu Yako, a young Mbau chief who formed one of our party, jumped overboard while the canoe was poling along two or three knots, and picked up several specimens.

The tributary stream Wai manu, opening into the Wai levu at Navuso, courses in an easterly direction from the neighbourhood of Namosi through a very populous district; but the large river, from Navuso to Naitasiri, is very scantily populated. Very few cocoa-nut trees are to be seen, although their importance and value are well known to the people. This is attributable, however, to the continued warfare of former times: when a town was besieged the resources of the people, including bread-fruit and cocoa-nut trees, were cut off by the enemy.

Rich foliage, embowered with creeping plants, beauteous treeferns, and Nin sawa trees, everywhere met the eye. All the intervening spaces, but more especially the immediate banks of the river, are covered with tall grass and humbler herbage. The river gradually closes from Wai ni Kumi towards Naitasiri, but widens out again at the latter place, the left bank in particular

rising to a considerable height.

On arriving at Naitasiri we secured our canoes and ascended a high grass-grown bank, following a beaten path leading through a grove of shaddock trees, the perfume of whose blossoms loaded the air. It was arranged that we should put up at the house of the The Mbure ni Sa was about 50 feet long by 21 wide, with a beautiful spar of the Mako sui tree as a main rafter. Sleeping places, furnished with mats, spread upon a soft layer of ferns and small grass, were arranged along each side. The young men of the town usually sleep in this building, but they are always ready to give up the berth to strangers—a comfort arising from native hospitality which is best appreciated by those who have experienced its advantages. A small creek on the right bank, near the above mentioned town, leads some little distance into the country. The left bank above this creek is said to suffer little from the floods which are known to produce such remarkable effects in

other parts.

The town of Natoaika was lately attacked and destroyed by some of the Naitasiri tribes; but it is now being rebuilt. The Cyrenæ in this part of the river are very large, and of a superior flavour, so that presents of them are sent to Mbau frequently. Large piles of the shells are to be seen near every house, and, from the accumulation of years, they form no small portion of the superficial deposits round the town. The ndawa fruit abounds in this district. This place was formerly well populated, but the people were decreased by the disease called lila, already alluded to, which broke out as an epidemic among them. The chief, who was at that time a young man, daily occupied himself in visiting the towns, and removing the dead bodies, which were immediately cast into the river. As this was generally performed by fastening a cord round the neck and slinging the body into the water, many moribund cases were strangled before their last rites were performed.

The rains are sometimes so heavy as to fill and sink canoes in the river, defying all efforts of the natives to bale the water out.

On leaving Viti we saw a woman coming along with a great load of fire wood on her back. The chief called her near us, as we were anxious to try its weight, which was estimated at about 80 pounds. She exhibited the greatest anxiety and fear when I approached to present to her a stick of tobacco.

The country is now more elevated, and little streams trickling down from a high source begin to make their appearance. Stratified rocks occur here and there. Mr. Waterhouse shot a duck on a remarkable quay of this formation, lying towards the right bank of the river. From this our course took a south-westerly direction.

On approaching Matai Mati, a great number of people showed themselves on the banks of the river, the men all armed with clubs and spears, shouting in the wildest manner; and but for the presence of the women and children, which is always a friendly indication, a very formidable appearance would have been presented to the minds of those unacquainted with the Fijian character. We climbed up a steep, slippery bank—composed of reddish brown clay—to the town of Matai Mati. Ko mai Naitasiri went before us to the Mbure, where we sat down while arrangements were being made to communicate with the chief of the place, in order that he might meet us at the branching of the Wai levu river into the Muna ndonu and Wai ndina, where we were to take up our quarters for the night.

Having settled this matter satisfactorily, we made a rapid

survey of the town, and returned to our canoes.

The left bank is here very precipitous, with stratified rock

peering here and there through rich vegetation.

Having reached the town of Tau-sa just within the Muna ndonu, we seated ourselves on a large lali in the strangers' Mbure, and waited the arrival of the chief of Viria, for whom we had despatched a messenger from Matai Mati. The Mbure ni Sa is a low, but rather long, building, fitted up in the usual way, with its alternate fire, and sleeping berths, arranged on each side. Two curved sticks, or stout creepers, supported a bundle of firewood over each fire-place. We were much amused to find the carapace of swimming crabs and other relics of the salt water, so highly prized as to be placed in the thatch, for the purpose of ornament. We observed the heads of fresh-water fish, very nicely cleaned, set on little sticks and stuck in the thatch in the same way. Amongst other things we selected several of the so-called sharks' heads, which we were anxious to obtain for examination. They were beautifully prepared though very much smoked and covered with dirt.

The natives were now making their appearance one by one, and venturing nearer by degrees to see the Papalangis. A large root of yanggona was now presented to our chief, and received Vaka Viti,† with the acknowledgment of thanks, the chief addressing the messenger in somewhat these words: "I lay my hand on this root of yanggona, desiring that peace may reign in Viti,‡ and that the gospel may spread through the land." The people simultaneously exclaimed, "E mana ndiua, ndiua," which is an approving affirmative, equivalent to our "Amen," or "So be it."

After this all the adults of the town assembled to welcome the visitors, clapping their hands and exclaiming "Sa mata vinaka mai na turanga," or, "Welcome to the chief who comes on a peaceful errand!" The chief now stated who we were, and the object of our mission, giving a detailed account of our proceedings up to that time, while a fugleman interlarded the more impressive parts with "Io Sakwa" (Yes, sir); "Sa vinakwa Sakwa" (Good, sir). The speech consisted of a series of pithy sentences, or bursts

<sup>\*</sup> Papalangi, a foreigner. † Vaka-Viti, Fiji fashion. † Viti, Fiji. vol. XXVII. R

of eloquence; commencing with a pathetically drawn out hesitation, and ending rather abruptly, in a louder tone of voice climax being the figure most generally preferred. The chief of Viria made his appearance in the evening, when all these ceremonies were repeated.

He was very dark, muscular, and well made, and much superior to many of his people. His dress consisted solely of a narrow strip of masi, arranged in the T bandage fashion, and ending in a

bow and tail-piece behind.

Tea and biscuit were served out among the chiefs, who expressed their satisfaction by the repeated comparison of their own mode of living, with the comforts of civilized life, enjoyed by the Papalangis. Pipes and tobacco were in the highest estimation; but as we had brought but a small stock from Naitasiri we were

obliged to be a little economical.

As the evening passed on, I constructed a rude flute of bamboo, to the music of which Mr. Milne figured away in the sword dance and Highland fling (thermometer 86°), enshrouded in ample folds of native cloth, under the flattering hallucination that he had once more assumed the plaid. Two pieces of sugar-cane, crossed on the floor, supplied the place of broad-swords. The remarkable agility exhibited in the dance created great astonishment amongst the natives, while the heat of its execution had acted most potently on the vessels of the performer's skin. Then followed a series of gymnastic feats, which largely called forth the faculty of imitation on the part of the more youthful members of the community.

The festivities of the night being ended, all our traps were collected together in charge of some of the party, who slept near them, while others selected snug berths for themselves in the corners and different parts of the house. The sleeping-places were well covered with matting, and warmed by small fires on either side. Many of the taukeis or residents slept in the Mbure with us; so that, with our own party, fifty persons must have been accommodated.

Thursday, 21st August.—It rained very heavily at intervals throughout the night, and continued so the next morning; but, as there was some little chance of a clear-up in the weather, we determined to resume our course for Soloira. The chief provided us with a pig for our journey, and parties of natives attended us. On firing one of our revolving pistols, great shouts of surprise were raised.

We now proceeded up the left bank of the river, with the addition to our party of a messenger from the chief of Viria to the chief of Soloira, Ko mai Vuni Mbua.

On the right bank we visited a small turmeric manufactory, in which a party of women were busily employed. The receiving-pits, which are dug in the ground, are lined with fine grass and

banana leaves, so as to retain the juicy parts. The grated root is afterwards placed in the body of a canoe, and raked up and strained through a fine basket lined with fern leaves. It is now conveyed away in bamboos and exposed to the weather for several days, when the supernatant fluid is removed from the sediment at the bottom. This is used as food, but more commonly to daub over the bodies of women after childbirth, and those of dead friends, and widows immediately before strangulation. Turmeric is said to be very plentiful here, and much valued elsewhere.

The river was swollen considerably after the late rains, and the effect of large floods is apparent in the frequent occurrence of snags and drift-wood entangled in the branches of the trees on the banks.

The banks of this river are said to be the theatre of many fierce battles in which the Naitasiri tribes were involved, and so much human blood has been poured into the stream, that the natives call it "the river of blood." In passing along, the chief pointed out the situation of several towns which had been destroyed in these encounters in past years, and connected with which, every one is ready to tell some revolting tale. The country along the banks of this branch was formerly well populated, but it has been much reduced by war; the right branch, however, is still very populous, where its baneful influence has not been so severely felt.

The force of the rapids frequently checked our speed, and the river-bed being continually subject to change by the action of the floods, the position of the channel was rendered exceedingly uncertain. The river also was very tortuous, though trending mainly to the westward, and shallows often extended quite across its course so as to prevent the possibility of navigation when the waters are

low.

After a more or less serpentine course for some distance, the river suddenly turned to the southward, and when we got into position, with a bamboo forest on rising land, bearing E, the Mbuggi levu range became visible, bearing w. After this, as we proceeded, the mountains bore w. by s., w., and w. by N. successively.

Having reached a part of the river, with a broad pebbly beach on the right hand, we determined to bivouac there, as night was approaching, and we found it impossible to gain Soloira before dark. Fortunately for us, a turmeric establishment, made of bamboo and roofed in with wild banana leaves, had been constructed on the spot the day before. We saw a party of natives on the opposite side of the river, and hailed them to bring us some yams and firewood. Butchers' knives procured these things, with a small pig which was killed for our working party.

Although we had experienced such heavy rain, the flood resulting proved most fortunate for our expedition, as we were enabled to

take our large canoe a little further; but, in consequence of the rapid fall of the waters,\* great difficulty was repeatedly experienced next day poling our craft along. The young men in the small boat displayed the greatest agility in towing it along the shore with a rope, and often swimming against the flood or across the deep

parts of the stream to regain their footing.

When we had proceeded about ten miles in a westerly direction, the river took a southerly sweep. The flood was coming down with great force, widening its way by undermining the sides of the banks. A great mass of the right bank fell in just as we passed the spot, and we now and then observed trees rolling over and over borne down with the body of water. In other places massive trees were torn up by the roots and lying prostrate in the stream. The banks of the river here are composed of a basis of small rounded stones and pebbles, filled in with grit and sand, and overlaid with comparatively recent alluvial deposits resembling those already alluded to.

About half a mile from this spot and on the right bank of the river we noticed a small soro, † to propitiate the gods presiding over the fish of the stream, placed in front of a tree, whose intricately-woven roots were laid bare by the undermining force of the floods. The soro consisted of makita leaves, forming a little cone, with a cross piece on top of wood. On the left bank, a little further on, we saw two other soros, consisting of bamboo fishing-baskets,

answering the same purpose.

A native earth-oven.

We next came to a very large mbaka tree, with a clear earthy bank at its base, where sat Vere Malumu, brother to the Soloira chief. Several men were engaged in constructing a lovo; and preparing yanggona. We went on shore to pay a friendly visit, and were very warmly received by the natives. Our old friend Ko mai Naitasiri introduced us to the chief with much formality, as "Mbete ni lotu" (Christian minister), and "Turanga ni Manawa" (gentlemen of the man-of-war). When the ceremony was at an end, the distribution of pipes and tobacco placed us on a more easy footing.

Mr. Waterhouse and I went up a rather slippery path to the top of the nearest high land, from which we saw Mbuggi levu, about three miles distant, bearing w.n.w., and a range of mountains, called Lutu, was pointed out to us, bearing n.n.e., and appearing to be about 30 miles off, as the source of the river called Wai ni Mbuka, which opens into the Uluna ndonu. The latter river flows through the heart of the country, arising in a n.n.w. direction.

<sup>\*</sup> We noticed by the position of the canoe, and the water-mark on a post, that the flood had abated four feet during the night.

† Soro, an atonement or propitiatory offering.

On searching amongst the dead leaves in the forest, we noticed a species of Truncatella and two other species of inoperculate Diplommatinæ. One of them was minute and dextral, corresponding to that found at the island of Vatoa; but the others were sinistral and of much larger size. There was a distinct tooth on the columellar lip in some cases, but I could not detect an operculum. We obtained also the little Bulimus Tuckeri, and the generally distributed Plekocheilus and larger Helices.

The vegetation was more beautiful than anything I could have conceived. We noticed a particularly remarkable species of Flagelaria, with a stem of about 4 inches in circumference, scaling

the tallest trees by means of its prehensile leaves.

Having left this place, we proceeded up the river to Vakaudua, a rather small but well-inhabited town, most beautifully situated on elevated land, and surrounded with the river and forest scenery. We were received with the usual pomp, and the chief's speech over the root of yanggona was delivered with his accustomed gravity and chief-like bearing. The lalis, or drums, were beaten, at first to acknowledge the gift of an axe to the chief, and again in honour of our visit.

The evening was in part occupied with dancing and gymnastics on our part to amuse the natives, whose yells at every commonplace thing showed how little they had ever communicated with

the Papalangis.

On the following morning, after breakfast, we resumed our journey, occasionally encountering a heavy shower of rain, and, after having passed several difficult parts, and through numerous windings of the river, we arrived at the mouth of a tributary stream on the right hand, said to wind in a northerly direction to the base of Mbuggi levu, and round along the eastern side of the range. We continued our course, however, up the main river, and ultimately reached the province of the Soloira tribe, ruled by Roko Tui Wai Maro, or Ko Mai Vu ni Mbua, whose friendship was of the greatest importance to us. Our next difficulty was to ascend a very steep and slippery path, leading up a mountain spur, to the town of Vuni Mbua, the capital of the Soloira district, and the residence of its chief. The earth was so moist after the late rains, that we were obliged to use long "titokos," or walking sticks, to preserve our footing. The natives here, but more especially the women, who are much ill-used, and employed as beasts of burden, carry a titoko with them whenever they go on a journey.

When we gained the elevation, which seemed about a mile from the river, where we left the canoe and small boat, long bamboos of fresh water were brought out to wash our feet. Then followed the introduction, the presentation of yanggona and food, with the appropriate speechifying on both sides. When all this had been formally gone through, we took up our place in the Mbure ni Sa, which is a long and singular looking building, formed as it were of two pent-houses joined together, with an old canoe placed at the junction of the two roofs, as a gutter to carry off the rains. The internal arrangements were similar to those of the other Mbures we had already occupied. The lalis were hauled out through the low doorway, and the tum tum began to honour our arrival, and to acknowledge the presentation of two whale's teeth and a few axes and knives to the chief.

Taking advantage of a dry interval to see the country, we ascended a hill near the town, which is about two miles from Mbuggi levu. This mountain bore N.W. by W., and the island of Ovalau was visible in the distance, the N.W. conical peak bearing N.E. The position of Namosi was pointed out to us, behind some remarkable looking peaks in a W. by s. direction. From this point of view Mendrau-suthu—na-Mbasauga\* were concealed by

Mbuggi levu.

This elevation commands a very charming prospect of the surrounding country, more especially the mountain scenery. Mbuggi levu rears its lofty head to the left, with many peaked and rugged mountain masses in the immediate vicinity. The winding bed of the river diversifies the hilly region, through which it passes in the centre, and very distant mountains peer up, one behind the other, passing off, by aërial perspective, into the tints of the sky on the right. On looking upon the scope, through which the floods roll at certain periods of the year, and the comparatively small portion of it now traversed by the river, it may be easily conceived how the course of the latter, within certain boundaries, may vary with the casualties resulting from the action of the floods breaking down existing banks and filling up the previously open channels.

While ascending the river, we frequently observed that one bank rose more or less suddenly to a considerable height, while the other was comparatively low, extending into a sward of tall grass almost devoid of trees, and these characteristics changed from side to side, apparently in the most fitful manner; but the problem was at once solved by the bird's-eye view of the

district, commanded from the heights of Soloira.

The reward of a butcher's knife having been offered for the cones of the Dammaras in the neighbourhood, a native set off and returned very quickly with the prize. The people affirm that there are two kinds of Ndakua Ndina,† distinguished by the

<sup>\*</sup> A part of the serrated Mbuggi-levu range, bearing resemblance to the female breasts, and supposed to have yielded nourishment to a twin deity connected after the manner of the Siamese twins.

† The native name of the Dammara.

names of Ndakua leka (short) and Ndakua mbalavu (long). The former is said to be stunted in its growth, while the latter is remarkably tall, but they appear to imagine that the difference results from circumstances of position, exposure, nature of the

soil, &c. Mr. Milne brought in a fine collection of plants, after a heavy tramp over the hills through drizzling rain, titoko in hand. He succeeded in obtaining a specimen of a new coniferous plant, named Kau Solo by the natives, who class it with the Ndkua-Salu-Salu, which is identical with the Dacrydium cupressinum of New Zealand. Amongst other things I noticed a white Erythrina, agreeing in every particular, save colour, with the Erythrina

Indica. The ferns were exceedingly rich and numerous, including

doubtless many new species, if not new genera.

We obtained three different species of inoperculate Diplommatinæ, a Truncatella, a large Helicina, a minute Egea, and several Helices, in the forest, on the mountain side near the

town.

While at Soloira, the chief dealt with us in the handsomest manner, and food was prepared for us on a very liberal scale. Our papalangi store, however, falling a little short, we found it necessary to despatch a messenger to Naitasiri, our last depôt, for a fresh supply. While directions were being given to a rather stupid, though willing native, our young Mbau friend, Katu Yako, volunteered, in the most spirited manner possible, to execute the journey himself.

Whilst seated on a grassy bank, in the cool of the evening, we found ourselves surrounded by a great number of natives, who made very particular inquiries respecting Her Most Gracious Majesty. When we told them of the anthem in which we implored Heaven's blessing to rest upon our Queen, they expressed a strong desire to hear it. We at length yielded to their entreaties,

and, amidst great applause, sang "God save the Queen."

We found that the custom of strangling widows prevailed in the district of Soloira. In conversing with the chief upon the subject, he at first denied, but afterwards admitted it. He listened favourably, however, while Mr. Waterhouse advised him to abandon this evil practice. In many districts through which we passed, we found that the practice of sorcery was prevalent. When one individual wishes to effect the destruction of another, he applies to the sorcerer, who immediately exerts himself to procure some scraps of food left by the doomed victim, or portions of his dress. These are then placed in contact with certain leaves, and the result of that contact is said to be the death of the individual whose life is sought. The natives generally place great confidence in these acts of sorcery, which are called "Vaka Ndrau ni Kau taka" (literally, to accomplish with leaves), and the master of the art becomes an object of much dread, and generally commands great respect and attention in those towns to which his fame has preceded him. In some instances, where anything, as yanggona for instance, has been taken from a plantation, and the thief is unknown, this custom is resorted to in order to discover and punish the transgressor. A portion of the vanggona left in the plantation will be placed in communication with the fatal leaves, and the result will be the death of the offender. An instance was stated by one of our party which had come under his own observation. Two men had stolen yanggona. The "Vakadraunikautaka" was practised, and as soon as the fact became public, two individuals were seized with illness which proved fatal, and before dying they confessed that they were the thieves. There was no indication of disease in their case, and the narrator was inclined to the opinion that their death was the result of their nervous and superstitious fears.

On the morning of the 28th, after breakfast, we set out from Soloira in small canoes, each carrying about three persons, with the little boat containing our provisions, &c. The large canoe was hauled up out of the influence of the floods and properly secured. On reaching the next town, about 4 miles further up the river, we made fast our little boat to await our return, as it would be impossible to take it any further on, on account of the shallowness of the water in some places, and the force of the current in others. We were soon safely housed in the Mbure ni Sa of Nondo yavu na ta thaki. It was by far more comfortable than any in which we had taken up our abode hitherto. The building was spacious and well supplied with all the native requisites for such a place. Moreover, the display of natives was not so formidable as to numbers. The people were represented by two elders, one of whom had been a great man-slayer in his time, and both asked many questions about the lotu; but they said that Ko mai Vuni Mbua must take the lead, before they could embrace Christianity.

We noticed one or two very remarkable little objects placed outside the mbure, consisting of rounded stones, coloured yellow with turmeric, and elevated upon short stumps of fern-trees. We thought at first that they were shrines of some deity, and our chief, under this impression, placed his foot indignantly upon one of them, without however injuring it. We found out afterwards that pigs were tambued,\* and these stones were erected to warn strangers that pigs could not be obtained while the tambu was in

<sup>\*</sup> Tambu-sacred, a prohibition.

force. This reminded me of a tambu on mats, observed at the town of Viti during our visit, consisting of some of the materials of which the mats are made, elevated on a pole and crowned with a large shell of Triton tritonis. I could not help reflecting that the tambus on cocoa nuts, which we saw at the Isle of Pines, were of

a very similar character.

In this district, where cocoa-nut oil is not to be obtained, the gum of the Damurara (Makandre), which exudes in large quantities from the trees, is made up in the form of pastiles about 2 inches in length, and these are burnt one after the other, so as to keep up a continual light. Another more civilized mode of burning the Makandre is to surround a slip of wood with ribbon-like strips, so as to form a rude sort of candle. It is usual also to wrap the gum up in leaves, and bind it round with a rush or some such thing, and use it as a torch in passing from place to place by night. When burnt, as in the first instance, deep earthen basins protect the ignited gum from running about, and thus setting fire to the dry matting, which would rapidly demolish the house. We now discovered the use of a large conical stone with a hollow top, which we noticed in the Mbure ni Sa at Soloira. Not having seen the gum burnt upon it while there, it was rather problematical. The gum (Ndrenga) of the bread-fruit tree is very different from that of the Dammara, both in character and the uses to which it is applied. As it flows from the wound it is thin and limpid, but when received in a vessel placed beneath, it soon separates, like blood, into a more solid portion, which sinks to the bottom of the vessel, and a supernatant fluid. The latter is thrown away, and the deposit is placed in cold water to consolidate it more rapidly. Rounded masses of this substance are preserved for use, but it requires still further preparation before it can be applied as a luting or cement. Thus, it is worked up with the hands for some time at a certain degree of heat, when it becomes exceedingly pliant, and so adhesive as to stick to the fingers with the greatest tenacity, and interfere with any further manipulation. But this is prevented by anointing the hands with an oily juice extracted from the cocoa-nuts.

Nondo yavu na ta Thaki occupies the site of a once populous town, whose inhabitants are now extinct. We cannot procure any information on the spot as to the cause of their extermination. They were famous for cutting spears, and are reported to have been in the habit of taking down their mbures and houses in the morning when they went to work, and erecting them on their return in the evening. It is said that the chiefs of the coast used to oppress them so much, by burning down their houses as fast as they built them, that they were denominated the "people whose occupation it was to cut the timbers for houses." The present inhabitants fled from a district near the coast in consequence of war, and reached this place, where they found the ruins of houses

which had been built on a very large scale.

From all the inquiry Mr. Waterhouse made, it appears that the sole deities of these people are the spirits of their forefathers. In other parts of the Fiji Islands, besides the worship of the spirits of the dead, the existence of other gods, more strictly deserving the name, is believed. In the coast districts especially, the "Kalou yous," or gods without a birth, are alone venerated. The inland tribes of Na Viti levu do not worship, though they accredit, the deity Ndengei; and they affirm that the knowledge of him has been derived from Ra or Raggi-raggi, situated to the westwarda fact which, in the opinion of Mr. Waterhouse, goes far to prove that this has been the storehouse of the Fijian race, or that the natives of other parts have been immigrants, who received their information from an earlier stock. To Raggi-raggi is also attributed the knowledge of the nature and use of fire, as well as the mode of its production by the friction of pieces of wood. Uncooked food was at first deemed unpalatable, but one of the sons of Ndengei having rubbed two pieces of wood together produced fire, by which he cooked his food; and thus its advantages became known. The Tongese have a tradition of a similar nature (as noted by Miss Farmer).

Some places boast of prophets or seers, whose express calling is to foretell future events: they are quite distinct from the priest-hood. One of these old characters sat by us in the mbure at Vuni Mbua, and was very warmly taken by the hand by our chief,

with a patronizing Sa laloma-(my love to you).

29th.-We took leave of our friends at the town of Nondo Yavu na ta Thaki, and having passed through about 10 miles of the river, winding through the most charming mountain country, with occasional rapids and shallows, we arrived at the town of Na Seivau, famous for its hot springs. One of these was bubbling from the summit of an irregular mass of rock, apparently a portion of an ancient dike near the landing-place. The temperature of the water in this case was about 106°, and, collecting in a wide recess in the rock below, it formed a very delightful natural bath. At some little distance further on we visited another spring, with a temperature of 140°. Here also the water was gushing out from the summit of a very remarkable mass of rock, but the latter was very distinctly composed of a metamorphic breccia, presenting a beautifully variegated surface. The natives state that the water occasionally emits a disagreeable odour; but this was not very apparent to us at the time of our visit.

Na Seivau was destroyed some time back by the Namasi people. It was once famous for its cocoa-nuts; but these, with the bread-

fruit and other useful trees, were destroyed by the enemy, as is usually the custom in Fiji. This tribe was constantly at war with Namosi, and the well-picked bones of those of the latter people who fell, were suspended on the trees round the town; but the Namosi people stormed the place at a lucky crisis, killed a great number of the inhabitants, and took away the bones of their friends for burial. In the interior districts neither bread-fruit nor cocoanuts are to be found; and, it is said, not on account of the indolence of the people, but of their almost total ignorance of the use of these things. There is, moreover, but one, and a rather inferior kind, of Ndalo \* cultivated; and yams † are not planted in such large quantities as on the coast.

As an example of the character of Fijian warfare, the following case may be cited:—About two months ago Kuro Nduandua, the Namosi chief, assembled his forces to attack a rebellious town. He sought and obtained the alliance of the Soloira people. The allied army attacked the town, but none came within range of musket-shot but the "Invulnerables" of Soloira. These latter advanced boldly to the front until one of their numbers was shot through the head, and then the whole army, consisting of thousands,

ignobly fled.

The "Invulnerables" (Vaka thuru Kalou Vatu) are certain persons not necessarily connected with the priesthood, who, in the superstitious belief that they are inspired by their deities, and rendered spear and shot proof through their protecting influence, and, thus buoyed up, are known to perform acts of the greatest daring which generally effect a conquest. Before fire-arms were introduced into Fiji, these men were famous for their indomitable courage; but the skilful use of the musket has damped their ardour of late.

A remarkable instance of the many lessons read to superstition by this means occurred at Kasavu. When the Invulnerables headed the assaulting party, a ball passed through the large fan used on these occasions, entered the brain of the first Invulnerable, and seven more were successively shot dead in the attempt. The chiefs were so enraged at this, that they determined to club the priest for having so deluded the people, but he escaped their vengeance by flight.

The tubers of the Kaili, a kind of wa or creeping plant, is used by the people of Seivau as an article of food. They are first boiled, peeled, scraped, mashed up, steeped in the water and boiled again, for the table. They are said to possess a bitter and probably poisonous principle in their natural state, and require to

undergo the above process in order to remove it.

<sup>\*</sup> Ndalo, the Fijian name for taro. † Uvi is the native name for yams.

From Na Seivau we continued our course as far as it was possible to perform it by water. We found the river filled with large boulders, over and between which the water was rushing with incredible force, so that all our little canoes were necessarily hauled up on land, and the traps and moveables distributed amongst our party, and, having got into marching order, we wended our way, first, through a deep mountain-gorge of the most picturesque character, but afterwards through more open country, repeatedly crossing the stream, descending and climbing occasion-

ally very precipitate banks.

We met a lad who essayed to be our guide, having been sent by a white man named Harry (with whose reputation we were previously acquainted), to say that he had come down from Namosi to meet us at the town of Wai nu Mbi. When we arrived at the Mbure ni Sa of this town we saw the celebrated Harry, who, from his long intercourse with savage life, was evidently much embarrassed at seeing white faces once more. He was a small, thin, spare man, apparently in very ill health from the absence of those comforts which an Englishman's constitution demands. He wore a long beard, Fiji fashion, and, until very lately, when he was enabled to obtain some clothing, he was obliged to adopt the masi, or native cloth. He gave us a rapid sketch of his eventful history, his apprenticeship to the sea, disagreements with employers, colonial experience at Melbourne, trading amongst the South Sea Islands, and, last of all, his residence in the mountains of Viti levu, amongst a far-famed cannibal tribe of Fijians.

Harry led the way to Namasi, which we reached towards evening. It lies on the right bank of the Wai Ndina, in the luxuriant valley of Ono Mbaleanga, which trends nearly East and West, between rugged and lofty mountains. The sublimity of the scenery cannot be faithfully described, though some idea of it may be gathered from the accompanying views, very skilfully painted by Mr. J. Glen Wilson, from some of my sketches taken on

the spot.

We put up in a small mbure on the opposite side of the river, where we waited while the chiefs and people were assembling in another building to greet our arrival and receive our presents. Our chief was received with great pomp and respect, although but a short time ago the most inimical feeling existed between the

parties.

In the rara, in front of the town Namasi, we observed two rows of small stones nicely let into the ground as a sort of register of the number of Mbokolas from time to time brought to the town. A chief, or person of rank, was indicated by a stone somewhat larger than the rest. It is customary to offer part of each body

to the spirits of the dead, and this part is not eaten. We also observed a considerable number of human bones, grown over with mosses and ferns, hanging in the boughs of large trees in the rara.

In the outskirts of the town there is a large and remarkable mass of conglomerate rock, upon the summit of which the remains of the last king were laid. A handsome mbure was built over them, and offerings of human food are still presented to the spirit

of the deceased whenever the opportunity presents itself.

A few days ago a large canoe from Navua went out on its first voyage, when a fleet of the enemy from Serua attacked it, and succeeded in killing one man, who fell overboard. The Serua people now dispersed, and the canoe, on returning, landed a detachment with directions to surprise the enemy on coming ashore. They fell in with a party of seven, four of whom were killed, two fled, and one was taken prisoner. The latter was almost immediately boiled alive in a large cauldron. Koro Nduandua, the perpetrator of this cruelty, addressed him, in short terms, to the effect that, as he had so wickedly cut to pieces a living man of his (Koro Nduandua's) people, he should be served as the case deserved. The unfortunate man was then thrust headforemost into the boiling pot. The greater part of the slain were eaten at Navua, but parcels of the revolting food were distributed amongst the chief's dominions in the mountains.

On the morning of the 30th, after a little parley with the chief, Na Ulu Matua, the knee of a mbokola (dead body), already cooked, was brought to our mbure. The bones had been removed by an incision made on one side, and the whole was carefully wrapped up in banana-leaves, so as to be warmed up each day in order to preserve it. Of six parcels of human flesh which we knew to have been sent to Namasi, this was all we had an opportunity of seeing. One leg was said to have been deposited at the

grave of Viriula,\* but this we very much doubted.

Mr. Waterhouse spoke to the chief very impressively on the subject, pointing out all the evils which follow in the wake of cannibalism. I saw very distinctly that this savage was quite ashamed of himself; but I saw also that, if he did feel inclined for the tempting morsel, there was now very little chance of our seeing him in the act; but, for my own part, I am quite satisfied, and do not now desire further ocular demonstration of the existence of cannibalism in Fiji.

We have every reason to believe that the portion of the last mbokola, which Na Ulu Matua asserted had been placed upon the "rock," † was eaten on the sly by this cannibal, whose morbid

The deceased king, and father of Kuro Ndua-ndua.
Where the remains of the last chief were laid.

taste for human flesh was acknowledged by all the people in the town.

It is said that the chiefs alone partake of human flesh, it being too delicious for the common people to feast upon. Jobi, a Tongan native, and one of our party, happened to stumble into the chief's house, and he distinctly saw a human hand hanging in the smoke over the fireplace. Now, although the distribution of all the other parts had been accurately detailed to us, no mention was made of this, so that the dissimulation of Na Ulu Matua was clear enough. Most probably, had we approached the spot, the inviting morsel would have been quickly conveyed out of the way. Mr. Waterhouse was informed that the chief continued to eat his portion at intervals throughout the day, until it was all demolished; but an old favourite in the town helps him out with it.

When a wish was expressed to see the portion which he stated had been placed on the "rock," he remarked, with a transparent cunning, that very probably the dogs had eaten it. When Mr. Milne visited this rock, he saw several broken skulls and other bones, which appeared to him to be those of a pig; but some time after, when we went to see the spot, we found it swept and garnished. The occurrence of pigs' bones was likely enough, as Harry informed us that large pigs were frequently offered up to the presiding spirits.

Viriula, the father of the present chief Kuro Ndua-ndua, is said to have been the parent of sixty children, by numerous

wives

On our first arrival at Namasi, we heard that a beardless youth had eloped with his aunt, who was the wife of a petty chief. Having spent a few days in the bush, they ventured to a town near Namasi; but, unfortunately for them, the woman's brother happened to be in the town, and the enraged brother uplifted his club to kill her, but she prayed rather that she might be strangled. This request was quickly executed, and the young lover desiring that he should be strangled also, shared the same fate and died with her. Two persons were thus launched into eternity by the hands of a man who had brought us food the same morning. It appears that, if the youth had not been strangled at the time, he would have been clubbed by his own brother whenever they met. Such is the fearful state of things at present existing in this benighted region, where the wickedness of man alone sullies one of the most charming countries in the world.

31st, Sunday.—We had a short service in our mbure, attended by the principal chiefs and one or two visitors from the mountains, our own party including several men from the Soloira district. Mesaki, our excellent friend, whom the Rev. Mr. Moore com-

missioned to join us from Rewa, preached a short but impressive sermon beautifully adapted to the occasion. The truths of Christianity were boldly but respectfully submitted to the consideration of the heathen party. Our host, the celebrated Harry, declared that he never could have believed it, had he not heard it (alluding to the talented discourse of the native). Ko Mai Naitasiri, as usual, wept bitterly during the prayers. After the sermon, Mesaki, Jobi, Katu Yako, alias Benjamin, and others from Mbau, were engaged in good-humoured argument with the chiefs, whose false principles seemed to have suffered a severe shock. They stated, however, that Koro Ndua-ndua and his party must first embrace Christianity before they could venture to do so.

In the course of the evening a very laughable representation of a spirit was enacted by one of the natives, dressed in bananaleaves, with a large, massive wig on his head, and a mask formed from the bark of a tree and dyed with turmeric. He flaunted along by our mbure in a most theatrical manner, and startled the

more youthful members of our party.

1st September .- After breakfast, Mr. Waterhouse and I set out, in company with Na Ulu Matua and Harry, to visit the little river called Wai ni Ura, where Harry supposed he had fallen in with the philosopher's stone. We ascended a mountain-ridge with precipitous sides, titoko in hand, and, having reached the top, commenced our descent into the next valley, through which the Wai ni Ura flows. The scenery was indeed very grand, but the footing was exceedingly difficult. Having selected some specimens of the rocks, and refreshed ourselves with a draught from the cool stream, two alternatives presented themselves to us, namely, to descend the valley with the course of the river, stepping from one huge boulder to another, and scrambling along vertical cliffs, over which the water now and then came tumbling down, or to reascend the ridge and retrace our steps. The former was chosen, and, from the difficulty experienced, we have no particular desire to visit Wai ni Ura again. The titoko was of the greatest service to us in descending slippery rocks and jumping from one to another. The rocks are spangled with iron pyrites, which makes its appearance wherever the surface is broken, but we were not fortunate enough to discover gold.

An ore of antimony, which we had at first mistaken for lead, was brought to us from Umbi, a distance of about 10 miles from Namasi, according to Harry. We did not visit the place, but were informed that the ore exists in considerable amount in the locality mentioned. It is said to occur in two large veins in the side of a hill, and, if one may judge from the quantities brought down by the natives in bamboos at different times, it must be very plentiful indeed.

September 2nd.—Formed an expedition to visit the celebrated Moti vai tala, at the division of the two streamlets which respectively open into the Namasi and Navua rivers. Na Ulu Matua and Harry accompanied us, and our walk through the vale of Ona Mbaleanga was very pleasing. We ascended a rich mountain valley to the left of Na Ndela ni Solia, and soon reached a clear babbling stream, dividing into two smaller streamlets at a very acute angle, the left branch trending to the Namasi river (Wai Ndina), the right one wending its way to the river flowing

to Navua, on the south coast of Viti-levu.

The natives say that a moli (shaddock) tree formerly grew at this spot, and when the fruit of it fell into the last-mentioned stream it might soon after be picked up at Navua in perfect condition, but, falling into the Namasi streamlet, it became rotten before reaching the sea at Rewa. This is, in short language, the story of the Moli vei tala, so called, and it is often adduced by the natives to afford an idea of the relative length of the two rivers concerned. The distance of Navua from this place by the river which leaves the valley of Nuku Tambua is computed to be about 20 miles, and it cannot be less than 91 from Rewa; so that the tale of the Moli vei tala is very likely to have been founded on fact.

We saw but one young moli tree, growing where the original one stood; but Mesaki, our good friend from Rewa, in true native spirit, had very silently brought up another young plant from Namasi to occupy the vacant spot, that Nature herself might perpetuate the tradition.

On turning over the dead leaves near a large mass of rock in this locality, we obtained a profusion of Truncatellæ and some few Diplommatinæ. The genera Egea and Helicina, so usually found with those just mentioned in other places, are very scarce indeed

throughout all the districts examined.

September 3rd.—We collected our party together, bid farewell to the Namasi people, and commenced our march, passing through very picturesque and beautiful country, and occasionally crossing the river.

Going towards the place where our canoes were hauled up, we noticed some offerings made to the spirits of the dead, consisting of boiled Ndalo, laid out on pieces of masi, supported by four uprights rudely cut from the bush, thus forming a primitive sort of altar.

All our gear was now distributed among the little canoes in charge of the poling crew, while the greater number of the party continued their route along the banks of the river until it became deep enough to proceed without continually jumping out to drag the frail craft over the shallows.

We reached Noudo Yavu early in the evening, and, as the day was too far gone to continue our course to Vuni Mbua, we slept at the former place, where we met with the greatest civility from the people. A member of the council was deputed to express the regret of the old gentleman previously mentioned that we had not been received on our last visit with as much hospitality as they could have wished, and begged that we should remain the next day in order that a feast might be prepared for us. As one of our party was ill, however, we could not make further delay, so politely declined the invitation. But in the morning early, anticipating our departure, baskets of cooked yams and taro, with a large pig, were presented to us with the usual ceremony, and accepted Vaka Viti (Fiji fashion).

September 4th .- On our way to Vuni Mbua we recognised the Mata ki Naitasiri \* sitting on a bank awaiting our arrival. He stated that he had been sent with an invitation from Ko mai Vuni Mbua, the Soloira chief, to put up at his town that night while food was being prepared for a feast. This, of course, we were also obliged to decline, as we had arranged to make the best

of our way to Naitasiri.

Having made a sketch of the chief in ordinary attire during our last visit, he now appeared on the bank of the river to greet us, enveloped in folds of white masi, with a large pearl oyster-shell, handsomely bound and inlaid with ivory, after the manner of the drawing, and expressed a desire to have these things added to his portrait.

Mr. Milne determined to perform the journey to Naitasiri by land, so enshrouding himself with havresacks for his plants, he marched off under the guidance of a young Soloira chief, while we

continued our course.

A dark-coloured eel, about 4 feet long, rapidly crossed the stream near this spot; and, when we approached the branching of the river, some men in the foremost canoes cried out "a nggio, a nggio" (a shark, a shark), and one struck at it with a pole. It made off, however, unburt, though not before we saw enough of it to satisfy ourselves that it really was a shark, or a very close ally.

We reached our old quarters at Naitasiri after dark in the evening. Mr. Milne had arrived before us, having travelled nearly in a straight line from Vuni Mbua through fine open country, the

distance appearing to be about 15 miles.

September 7th, Sunday .- We had a short service in the morning, conducted by Mr. Waterhouse, while Mesaki preached at a neighbouring town. The breathless attention of the natives to all that had been said was very striking, and on the part of the females especially the deepest feeling was evinced.

Mr. Waterhouse and I went across the river the following morning to explore a richly-wooded district, through which a beautiful stream trickled down to a deep creek. Near the water's side we found a small caracolla and some helices. On turning over the dead leaves we saw the tail of a bluish-black snake peering from beneath a loose clod of earth; but, although we had the assistance of a native, the animal succeeded in making its escape. It seemed to have vanished into the earth in a most mysterious way. We ascertained that this was the snake called mbolo by the natives, which, if seen in the path by warriors going to battle, is considered an evil omen.

September 9th .- We strolled with Ratu Vaka Ruru to see his yam gardens. One of these contained about 600 mounds, and upwards of 50 natives were hard at work making an embankment around it. We expressed a wish to eat a shaddock, and a lad was immediately despatched to climb a favourite tree and select one or two for us. While up in the tree, the boy observed a snake coiled round a small branch; we hastened to the spot to see if it were anything new. It proved to be a species of the Coluberidæ; of which we had previously obtained several specimens; but there was a large tick adhering to a raw part of his tail. This tick is known as the Kutu ni Ngata, or snake-louse, and pigs which go into the bush are often attacked by it. The natives believe that the pigs derive them from the snakes, because those pigs that remain in the towns are not infested by them. The casual visitation of these loathsome creatures, however, was shown to us by the fact that our chief removed one which had attached itself to his leg.

The young chief showed us an enchanted stone, lying at the root of a venerable tree, and said to have been once a shark, but now transformed into stone. A small hole in the stone was pointed out as the place where the shark was speared. In former times this stone was regarded as a god. The chief drew forth an arrow, which remained as a relic of the Soros, which had been offered at this shrine.

Dagwell constructed a "trot," with the assistance of some of the natives, in hopes of capturing a shark. The hooks were fastened to a strong line of sinnet with a very fine material stripped from the bark of the hibiscus. The scheme, however, proved ineffectual, as many of the hooks were found snapped across and the line was ultimately carried away.

While at Na Noudra Yavu, death-guns were heard at some distance, and the natives affirmed that they had seen fire in the direction of a town called Matai Mbau; but they were unacquainted with the particulars of the case. Further on, however, we ascertained that the death lali had been also heard at the same time. Three days previously the people of Matai Mbau had

attacked a neighbouring town and were repulsed with a loss of three men, one of whom was a chief, after which several houses in their own town were burnt, out of respect for the dead. But the most particular part of the proceeding, if not the most ridiculous, was the destruction of the mbure, to express their anger with the deity for not having yielded them succour in their rash attempt, We also heard that the wife of the deceased chief had been strangled.

We spent some days at Naitasiri to recruit our party, and formed an expedition to ascend the Muna Ndonu; though we did not think it possible to ascend very far, as the tribes on opposite sides of the river were reported to be at war, and we might be readily mistaken for allies of either side before it could be possible to afford

an explanation.

We first proceeded to Viria, where we remained some little time, by special invitation of the chief. A grand ceremonial, as usual, preceded the presentation of some axes, knives, and whales' teeth-a duty which generally devolved upon Ko mai Naitasiri,

and apropos speeches followed on both sides.

We next visited Vura Tavola, where we made a short stay, examining the surrounding country. We obtained two small snakes here, called respectively MBolo damu and MBola loa, in addition to the Ngata damu, of which many specimens had already been sent home.

Physæ abound in the fresh-water streams and pools, and the Cyrenæ attain a very large size up this river. A small Tornatellina was picked off some leaves casually brought on board the

Proceeding up the river from Vura Tavola, we met with numerous zigzag fish-fences stretching across the river. A bamboo basket was placed at every angle, and a little soro, constructed of makita leaves, &c., occupied a grassy bank on one side. It is said that the fishermen constantly bring food to the spot to propitiate the presiding deity of the water. We saw a native examining one of the baskets, and found that he had caught a fish in it. A stick of tobacco purchased the fish, which was at once recognised by the Mbau men as a salt-water species, to which they give the name Ika damu, or Red-fish.

In attempting to cross one of these fish-fences a few miles further up the river, some armed natives belonging to Na Koro Mbau Mbau and the Nai Lenga tribe warned us back, signifying that all who passed were regarded as their enemies, so that we should incur their vengeance by doing so. Some of the bravest amongst them ventured to the front, while numbers were in the long grass with muskets and other arms ready for an attack. Many of our party were exasperated at their impertinence, and would have readily engaged to effect the right of passage in the river, but were restrained by better motives. We were anxious also to avoid the slightest mishap at the hands of these savages, and thought it the more advisable to return peaceably and organise another trip to ascend the Wai manu.

In returning we called upon the chief of the nearest town to represent the case, and begged that no warfare should result from the evident desire to punish the offenders on our account. The chief had been engaged on the opposite side of the river attending to his gardens; but was sent for, and he returned in great bustle. He was an elderly man, and, like most chiefs, very superior to the people by whom he was surrounded. Then came the greeting, and presentation of yanggona, with appropriate speeches as usual. The chief and all his counsellors present were astonished at the forbearance of the Christian party, and were still more surprised to hear such things from the lips of our chief Ko mai Naitasiri, addressing him in somewhat these words:-"In former times you presented whales' teeth to us to come and help you in more trivial matters, and our people have frequently fallen in the contest; but, now that you have been so grossly insulted, you desire us not to punish these wicked men." They referred the change to the right source, the influence of Christianity, and heard with great interest Mr. Waterhouse's representation of the nature of and blessings attending this only subjugator of the savage will.

Having bid adieu to Naitasiri, we returned to Navuso and made arrangements for a trip up the Wai Manu. The water was very deep in many parts of this river and very shallow in others, so that we frequently experienced much difficulty in urging the canoes along; indeed, we had to discard the large one altogether when

about 12 miles on our way.

The scenery on the Wai manu is very beautiful, on account of the great diversity of the surface and the richness of the forests. The distant mountains now and again peeped between the slopes of the hills, or, when we gained an elevation, stood up boldly against the horizon.

From the bank on which our canoe was hauled up we followed a well-beaten path over a ridge or spur leading to the high land on which the town of Koroi stood. From this elevated spot the surrounding country presented the most charming aspect, enlivened by a narrow strip of the sea (our first glimpse of it for the space of six weeks), with the islands of Ovalau, Wakaya, Mbatiki, Nairai, and Ngau spread upon its bosom. The forests in this district are exceedingly dense and stored with valuable timber.

The sedimentary rocks composing the height of Koroi abound in Foraminifera. Fossil \* impressions, or rather casts of animal and

<sup>\*</sup> Many interesting specimens of these fossils have been collected.

vegetable structures, were everywhere to be seen, so case-hardened apparently by a superficial layer of the oxide of iron, that their forms stand out in bold relief on the large slabs of rock over which the natives continually walk, the surrounding material being worn away by their feet. The original organised structures have been completely substituted by the common materials of which the rocks are composed. We noticed in many places large-masses of breccia, like that of Namasi or Ovalau, scattered about amongst the stratified rocks, in the most unaccountable manner.

This whole region is full of interest to the geologist, who may examine the layers of an ancient marine bed, now elevated about 400 feet above the level of the sea, and abutting against mountain masses of breccia and conglomerate, consisting of fragments of close-grained primary layas, cemented together by minute detritus

of the same materials.

We ascertained in a roundabout way that Ko mai Naitasiri had sent off a messenger to Vuni Mbua with whales' teeth for the presiding chief, requesting that he would send down the fishermen of Soloira to meet us on the Wai Manu and show us the sport of diving for the Ika loa (a black mullet, which is never seen at the surface, but always lives in the deeper parts of the river, feeding

round the rocks at the bottom).

On our way to the forests, about four miles beyond Koroi, we met the Soloira messenger, who commenced delivering his message in the sitting posture, and ever and anon, as our canoe was slowly advancing, he made a few strides on the bank and again resumed the sitting posture to continue his report. This was to the effect, that Ko mai Vuni Mbua was desirous that we should take up our quarters in the bush for the night, so that the divers might assemble the following morning. Expecting a good day's sport, we agreed at once to this proposal, and poled along in our little canoes to a spot where some native carpenters had constructed a rude shed to shelter them while engaged felling timber and cutting out canoes.

Approaching our destination, we observed Mr. Milne, who had preceded us, emerging from some dense foliage on the left bank, and soon afterwards two attending natives made their appearance with the botanical boxes full of specimens. We found that the shed was rather small for our party, but Ratu Vaka Ruru and several of the Mbau chiefs augmented its dimensions in a very few minutes with bamboos, tall grass, and wild banana and ndalo

leaves, all of which materials were procured on the spot.

In the course of the evening a party of Soloira men made their number, bearing no less that 32 fine specimens of the Ika loa, for which they had been diving while approaching the rendezvous.

An immense lovo, or native oven, was now constructed to cook the fish; but as they were not likely to be ready before the next morning, we kept two or three for our immediate use, and they

proved most excellent eating.

Torches, consisting of long bamboos split up at the end, were soon flaming about in all directions. A permanent stationary light was obtained by burning the dammara gum (Makandre) on a large stone. The old chief fed the flame very assiduously with small pieces of the gum, cautiously inserting one after the other, while he kept'up an animated conversation on Fijian topics. The Soloira men encamped near us, and we occasionally heard the discordant uproar, signifying that the yanggona bowl was ready; and the whole scene, with all its accessary circumstances, was well calculated to call up in one's mind the vulgar conception of the other world.

On the following morning Ko mai Vuni Mbua and his brother Vere Malumu presented themselves, and, when the greeting was over, we collected our things together, and followed the fishing party, which preceded us in the direction of Koroi. The deep parts of the river were selected for the sport, and a circle of divers closed in towards the middle, frightening the ika loa into nets of very simple construction held open to receive them. The divers appeared much exhausted on coming to the surface; and fires were lit on the nearest gravel beach, around which they assembled to warm themselves and recruit their energies. This novel mode of fishing was so assiduously carried out by the Soloira men, to exhibit their justly-reputed skill in capturing the ika loa, that when we returned to Koroi we could not have had much less than a hundredweight of fish to dispose of. Here Ko mai Vuni Mbua and his people took leave of us, bearing off in triumph the presents which we distributed amongst them.

We spent one day more at Koroi collecting specimens from the fossilliferous slabs of rock, and examining the forests in the vicinity; and when we had almost formed a resolution to explore a portion of the south coast, where coral beds are said to have been elevated to a considerable height, we obtained information of the arrival of the Herald at Ovalau. We therefore returned to the ship with as little delay as possible, bringing with us, by their own particular desire, both Ko mai Naitasiri and his nephew Ratu Vaka Ruru, whose urbanity, unsolicited fidelity, and, in a word, princely conduct towards us, claimed our warmest gratitude.

## APPENDIX.

List of Towns on the banks of the Wai Ni Ki, proceeding from Kamba to the Wai levu (Rewa River), and entering it about 6 miles from its principal mouth.

Left bank (ascending). Kamba. Ndaku. Nai Vakathau. Na Mbo thirva. Mhuretu. Kiuva. Kiuva i ra. Kiuva. Mbulin. Namoli. Vaturua. } Nakelo. Tokatoka. Ndromuna. Vanua Ndina. Lomai na sau. > Tokatoka. Nuku tolu. Na Suekau. Vuthe.

Right bank (ascending). Thaulata. Vatoa. Wai thoka. Mokani. Nai songo Vau. Ndravo. Ndravo. Thakova. Matai. Ndravotu. Wai Kele. Narna si saisai. Namuka. Va Kele. Nakelo. Na Kau levu. Vutu Vou. Muana. Ndravuni. Tumavia. Na luna. Nuku na Tonga Ndravu. Nuku Nasilai.

List of Towns on the Wai levu, commencing at the mouth of the Wai levu and running to the point, where it divides into the Muna Ndonu and the Wai Ndina.

Lauthala, a small town occupied solely by the U.S. Commercial Agent and some foreign residents.

Nambulok.

Vuni ivi Ndeke. Na Koro levu. Na Vasa. Koro i Mbithi.

Wai loa. Navuso. Mataisuva, Wesleyan Mission Station. Vutia.

Narothivo.
Na sau.
Muana.
Nandoi.
Rewa.
Natho.
Nakorovau.
Nde ni vula.
Nalasi.
Nambali.
Nandungutha.
Waiyo.

Mburembasanga. Moli-tuva. Na Ndoru.

Vusuya. Lewa i ra. Na ndali. Nousouri.

Verata i wai levu.

Na linga.

Kasavu-At the westward bend of the

Nakandi.

Viti.

Koronggangga. Naitasiri. Tovutovu. Natoa ika.

Matai Mati-Shoals commence.

List of Towns on the Wai ndina, or left branch of the Wai levu.

Nanggali-Tidal influence ceases here.

Na vei sama sama.

Na tho sui. Na Mbitu vula.

Na Mbi Kau. Na Kuluva. Na Vakandua. Vuni Mbua.

Na Koro Vulavula. Nondra yavu na ta thoka.

Nau.

Na vunga yanga.

Wai ni Mbi. Nailili.

Ndelavu. Karavatu. Na ulu vatu. Nai Vakaruku.

Mataimbau. Na Mbulimbulia.

Na Seivou (Host springs). Ndelai Lasakau.

Na sinu mata. Tumbu waiyaka.

Namosi.

List of Towns on the Muna Ndonu.

Viria. Wai Mali. Na Vuthu. Vuni Tavola.

Na sama. Na tavea-Tidal influence ceases, Tausa. Vunn. Na mi Ka. Ndere i valu.

Koro Mbaumbau.

List of Towns on the Wai Manu.

Na ivi Kinda. Nai vui vui. Koroi.

Rough estimation of Distances.

					Miles
From the mouth of the Rewa Riv	er to	Na	THE		 12
" Navuso to Naitasiri	44				000
" Naitasiri to the mouth of t	he W	ni N	din	n	 12
" the latter to Na Mbai Vatu				-	 
" Na Mbai Vatu to Vakandu				-	1
Here we obtained our nearest levu, which was about 2 mile	posi	ition			
From Vakandua to Vuni Mbua					 4
" Vuni Mbua ta Nondra yavu					 4
" Nondra yavu to Na seivau					 
" Na seivou to Namasi					
					 4

The forest country of both Vanua Levu and Na Viti Levu lies to the southward; but it is that of the latter island alone which demands notice in the present Report.

Total ...

91

We were credibly informed that forests of Dammaras occur along the banks of the Navua river, which opens on the southern coast about 30 miles from

Matai Suva; so that timber to almost any amount might be felled and rafted down the river, by native labour, at a trifling cost. Kuro Ndua Ndua, who is the independent sovereign of the whole district from Navua on the coast to Namosi in the interior, is the chief, with whom all such matters may be satisfactorily negotiated. Forests of Dammaras and other valuable woods abound between Namuka and Serua on the southern coast. Although the following list gives a general summary of trees available as timber, it cannot profess to include all.

List of Trees used for the Manufacture of Canoes and applicable to other purposes requiring large Timber.

1 Ndakua ndina, (true) leka, (short) Mbalavu, (long) salusalu. 3 Kau tambua. 4 Kau solo. 5 Vaivai (ni Veikau). 6 Vaivai (ni wai). 7 Visi. 8 Ndanamu ndina. b Ndamanu ndongondongo. thevatheva. d Ulu ni Kati Kati, 9 Yasi. 10 Ndawa. b vatu. 0 mali. d sere. 0 Kuluidamu. sisithi. 94 Mbuka, Nduru i yanasmu. nda ni Kalavu.

13 Tavola.
14 Tarawau.

5 Tarawau Kei na Kaka.
15 Lekutu.
16 Ndavata.
17 Tivi.

sawa.

773 17

yambia.

lemba.

b . (of Vanua levu).

11 Ndoi (of Viti levu).

12 Uto (bread fruit).

b " tavola.

18 Mbau.
b " tandra.
c " Vuti.

d " somi. 19 Vulavula. 20 Masi i ratu. 21 Nduvula. Dammara.

Small-leaved Taxineæ, bearing excellent timber, particularly the Ndakua Salusalu.

A leguminous plant, generally used for boat boards.

A durable reddish-brown hard wood, probably the green heart of India. (Callophyllum), straight, and much used for the masts of canoes. Not very servicable.

A very good wood.

Hard, heavy, and durable.

An excellent wood; the fruit used as food.

Fruit hard.

Fruit large.

Fruit white outside, red in.
Fruit red-skinned.
Fruit small (like a great small of the state of

Fruit small (like a gasterspod shell). Fruit yellow.

Fruit yellow. Fruit small, like the Karawan.

Fruit has flavour of arrowroot.

Fruit like the lemba. A white wood, large. A red wood.

A light close-grained white wood.

Fruit edible, timber useful.

This fruit, having no false or unfruitful
blossoms, is chosen as the emblem of

the truth-speaking man. With strongly-scented flowers.

Like the Tavola.

A beautiful reddish or brown wood.

Timber; very useful. White, soft, and perishable,

22 Ndilo. (Callophyllum), wood durable and susceptible of polish. ь mbalavu. Valuable in ship-building for knees, &c. The "Tamanu" of Tahiti according to Leka. C ndilo, or Ndamanu. the Rev. D. Hazlewood. 23 Malamala. 8 " vuti. Rough. Red. ndamu. . 24 Malili. 25 Sa. 26 Laumba. 27 Kau ndamu. 28 Ngati. 29 Kavika. (Eugenia). A light, straight, soft grained wood. 30 Maku. 31 Kan loa. (Black tree). (Erythrina Indica). 32 Ndrula. 33 Mokosui. Straight and tall but not very good for 34 Sathau. Bears its fruit octennially. 35 Ra Maia. 36 Laulaungai. 37 Mbausa. 38 Vure. 39 Ndulewa. A heavy and hard wood. 40 Kautoa. 41 Mbaka. A very majestic tree. 42 Kau Karo. 43 Vutu ndina. b " votho. c .. Kalau. 44 Wathi wathi. 45 Uthu uthu. 46 Mbu me mbeka. 47 Sausaula. 48 Nomosa. 49 Ivi. 50 Ndsago. A large mangrove. 51 Ulu bu Kura-52 Ndirini. 53 Lindi. 54 Veiwaru. 55 Nggulia. 56 Noko. 57 Ta ndalo. 58 Makita. Useful for spears, and leaves used for thatching. 59 Serua. 60 Wi. 61 Mbua Ndromu. b " toko. 62 Mbuambua. Wood resembling box. 63 Lonloa.

Trees employed in the Manufacture of Clubs.

64 Nokonoko. (Casuarina), a hard and durable wood.
65 Velau.
66 Saulaggi ndina.

Useful woods.

b " ndamu. } Useful woo

68 Vunga. 69 Lava rua. 70 To manu.

8 ., wiwi.

71 Vatu ni mboro.

72 Masi.

73 Se lavo.

74 Vau.

The leaves are rough like sandpaper and applied to the same use.

(Hibiscus), the bark is used for cordage.

PALMS.

Niu.

sawa. Viu.

Cocoa-nut, several species. Species of Areca. With flabelliform leaves.

ZOOLOGICAL LIST-Drawn up with the Native Names to facilitate further inquiry.

Bats.

Mbeka ndina, or loa.

" ndamu. lulu. Mbekambeka.

Manumanu vaka Mbni.

Tailless.

Tail included in the inter-crural membrane. With a long exserted tail.

Birds of the River.

Nga Viti, or loa.

" ndamu. Mbelo.

Visako.

Visaka.

Wild Duck. Teal. Bittern. Smaller species. The smallest species (light fawn colour).

Snakes.

Ngata ndamu Kuro.

Ngata ndamu.

mbambawavuti.

yasi. Mbolo loa.

ndamu.

Takes its name from the similarity of its colour to that of a Fijian pot.

Red snake.

Reddish, with an ashy or slate-coloured belly.

The largest of all.

Small, black. Small, dull-red.

Fishes peculiar to the Fresh Water.

ka loa (black).

Ndeke loa. " ndamu.

Mbau.

Voloa, or Vola. Teatia.

Ngandro.

Voseu. Vovuti.

Ndandarikai.

Mbandira. Nggio.

Mugil, with the habits of a rock fish. About 10 inches long.

About the size of Ndeke. Small.

Spotted muræna. Large eel.

Shark (?)

Fishes found in the Fresh Water but said also to exist in the Sea.

Sangka, Ika ndamu, Yawa. Mbati Kasivi. Large fish (Scowberidæ). Red fish.

Vetakau. Kanathi. Nggiawa. Reve, or wruwru. Vuvula, or singa. Yawa. Called Matamba on the coast and said to be daily taken down with the floods. (Percidæ.) A broad fish.

A mullet (?) (Percidæ). (Percidæ). (Large).

(Large).
(In ponds)—when large it is called Wailangi, One is said to have been caught at Navuso 5 feet long and 3 in girth (?).
(Percide).

Ika Ndroka.

List of Macrourous Crustacea.

Mothe. Lua.

Kandikandi.

Ura ndamu.

" mbala. " mbati.

" " tambua.

" ndina.

" vulu.
" loa.

" ngauvithotho.
" ngasau,

Transparent Palæmonidæ, believed by the natives to be different stages of the same species, but such is not the case.

At Vuni Mbua.

(Atya).

The Molluscous Genera have been already sufficiently noticed in the text.

XIV.—Description of Vancouver Island. By its first Colonist, W. Colquhoun Grant, Esq., F.R.G.S., of the 2nd Dragoon Guards, and late Lieut.-Col. of the Cavalry of the Turkish Contingent.

Read, June 22, 1857.

## 1. Position, General Aspect, and Geological Structure.

The position and natural advantages of Vancouver Island would appear eminently to adapt it for being the emporium of an extended commerce. It contains valuable coal fields, and is covered with fine timber. The soil, where there is any, is rich and productive; the climate good; and the singular system of inland seas by which it is environed teems with fish of every description. Capable of producing those very articles which are most in demand in neighbouring countries, and offering, in its numerous safe and

